

First Aero Weekly in the World

Founder and Editor: STANLEY SPOONER

A Journal devoted to the Interests, Practice, and Progress of Aerial Locomotion and Transport

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## Flight

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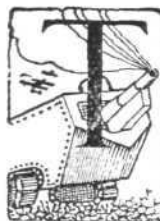
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## CONTENTS

	PAGE
Editorial Comment	
Australian Air Estimates ...	543
Homeward Bound ...	544
Avro "Avenger" ...	545
Cranwell Light Aeroplane IV ...	548
Royal Air Force Medical Branch ...	551
Air Ministry Notices ...	553
De Havilland Sports ...	554
Prof. Boel and the Albatross ...	555
Light 'Plane Club Doings ...	556
Royal Air Force ...	557
R.A.F. Intelligence ...	557
Correspondence ...	558
Personals ...	558

## EDITORIAL COMMENT.



THE July issue of our Australian contemporary, *Aircraft*, contains an interesting summary of the Australian Air Estimates, 1926-27, according to which the total vote for the financial year which commenced on July 1 will exceed £800,000 for military, naval and civil aviation. As our contemporary remarks, this is distinctly gratifying for a country with a population of barely six million, and is a very real indication of the serious view taken by Australia of the need for an adequate air force and an ever-expanding system of civil air services.

It is interesting to find that the vote for the Royal Australian Air Force is no less than £728,479, as compared with a corresponding figure of £347,043 for the previous financial year. One of the most impressive items is one of £250,000 for flying equipment for seaplane carrier and reconditioning of existing aircraft, this sum having been voted independently, after considerable debate at the end of June and beginning of July, and being, we understand, intended to be expended mainly on the purchase of seaplanes for the naval aircraft carrier now under construction at Cockatoo Island, Sydney. Unless, as seems unlikely, Australia intends to order these seaplanes at home, there should be some substantial orders placed with English seaplane firms in the near future, the votes having to be spent before June 30, 1927. Actually, the final total available in the estimates is not known at the moment, owing to the fact that the allocation of the annual vote of £1,000,000 for "Special Defence Provision to cover Developmental Programme" has not yet been made. This allocation is decided upon according to what the Cabinet considers to be the respective needs of the Navy, Army, Air Force and Civil Aviation Branch.

It is of interest to record that the Australian Labour Party approved of the Air Estimates, this being, perhaps, due not to any special love for air defence,

## DIARY OF FORTHCOMING EVENTS

Club Secretaries and others desirous of announcing the dates of important fixtures are invited to send particulars for inclusion in the following list:—

1926

- Sept. 10-18 Two-Seater Light Aeroplane Competition, Lympne.  
 Sept. 12 .... Race Meeting at Prague.  
 Sept. 18 .... Grosvenor Challenge Cup, at Lympne.  
 Oct. .... Schneider Cup Race at Norfolk, Virginia, U.S.A.  
 Oct. .... Stefanik Prize Race at Prague.  
 Oct. 24-28 .... Coppa del Mare, Italy.  
 Nov. 11-15 .... Coppa d'Italia, Italy.  
 Nov.-Dec. .... Paris Aero Show.

but rather to a dislike of the Cruiser programme. In any case, the effect will presumably be that continuity of policy may be counted upon, a fact of the greatest importance to future Empire defence.

Turning to the Civil Aviation Branch, it is found that a sum of £93,265 is to be voted, and this does not represent the total because of the non-inclusion of the proportion of the annual million pound vote to which we have already referred. The ordinary vote for development of civil aviation is one of £57,965, and as the amount allotted from the Special Provision last year was £36,000 and for the previous year £24,371, our contemporary thinks that "under the law of averages the same branch should benefit this year by an extra forty or fifty thousand pounds." This would thus bring the vote for development of civil aviation up to well over £100,000, and the total civil aviation vote would be something like £138,000, a figure of which Australia may be justly proud. Altogether the 1926-27 Australian Air Estimates set an example for the rest of the British Empire to follow, and the Mother Country at any rate will be unanimous in expressing to our cousins down under a "Well done, Australia."

**Homeward Bound** Alan Cobham, our greatest exponent of Empire aviation, has commenced his return journey, and during the next few weeks the thoughts and best wishes of the entire

British aviation community will be with him and his companions.

The difficult outward journey was successfully accomplished, and there is no reason whatever to believe that the homeward flight will not be equally successful. We are personally glad that Cobham intends to make a bit of a "dash" home. We at home know that a more or less leisurely cruise is at least as great a test of machine and engine as is a long non-stop flight such as those which pilots of other nations have been making lately, but there is no gainsaying the fact that the latter are infinitely more spectacular, and are likely to be much more discussed among the general public. On the outward trip Cobham demonstrated to the full the reliability of the machine and engine, and the feasibility of organising a seaplane route between London and Australia.

That having been proved, a rapid return flight would result in a convincing proof of the capacity of the de Havilland machine and its Siddeley "Jaguar" to make long non-stop flights at least as meritorious as any made by pilots of other nations. Cobham has already started well, his flight from Adelaide to Oodnadatta, a distance of some 650 miles, being accomplished in one day. If he can maintain long stages of somewhere near this length throughout he should soon be with us once more. May his luck hold.

## The Royal Air Force Memorial Fund

THE usual meeting of the Grants Sub-Committee of the Fund was held at Iddesleigh House on August 26: Lieut.-Commander H. E. Perrin was in the chair, and the other Member of the Committee present was Mr. Walter S. Field. The Committee considered in all fourteen cases, and made grants to the amount of £71 2s. 6d. The next meeting was fixed for Thursday, September 9, at 2.30 p.m.

## Comdr. John Rogers, U.S.N., Killed

COMMANDER JOHN ROGERS, U.S.N., who made the historic seaplane flight from San Francisco to Honolulu last year, was killed in an aeroplane accident at Philadelphia on August 27.

## R.A.F. Flying Accidents

As the result of an accident near Cambridge to a Grebe of No. 19 Squadron, Duxford, on August 18, Pilot Officer Roy Nugent Treherne Gape, the pilot and sole occupant of the aircraft, was killed.

As the result of an accident at Hucclecote, Gloucester, to a "Gamecock" aeroplane of No. 43 Squadron, Henlow, on August 19, Flight Lieut. Hugh Robert Junor, D.F.C., the pilot and sole occupant of the aircraft, was killed.

As the result of an accident near Worthy Down, Winchester, to a Vickers Virginia of No. 58 Squadron, Worthy Down, on August 23, Pilot Officer Hugh James Fitzgerald Kempthorne, the pilot and sole occupant of the aircraft, was killed.



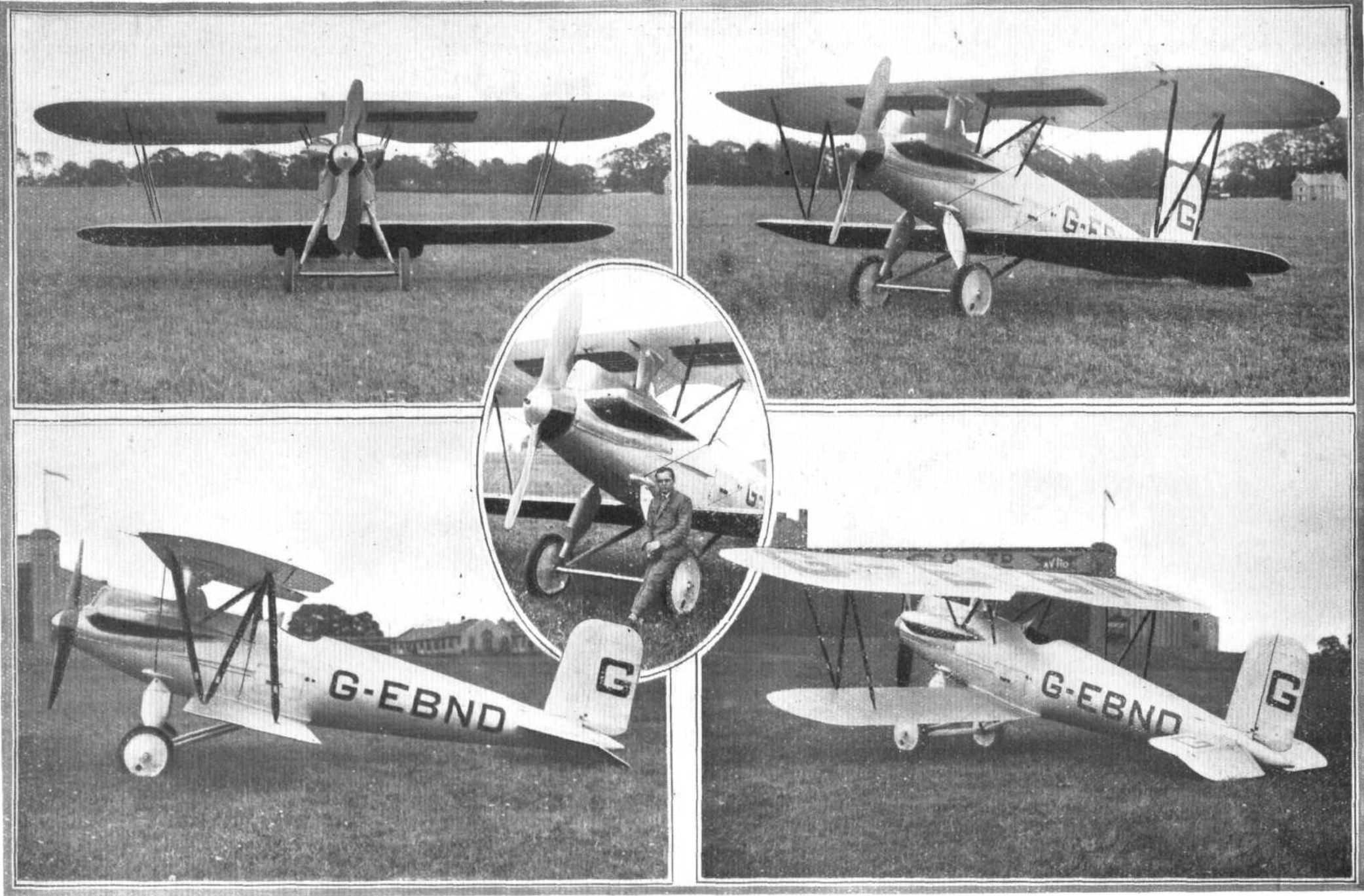
**NAPIERS FOR DUTCH EAST INDIES:** The machine shown above is a Fokker, type C.V., one of a batch built by the Fokker works for the Dutch East Indian Military Air Force. It is a two-seater reconnaissance biplane with Napier "Lion" engine, and is credited with a top speed of 147 m.p.h., a ceiling of 21,300 ft., and a useful load of 2,112 lb. The famous Dutch designer shows a decided preference for British aero engines.



SPEED ! Mr. Bert Hinkler gives a demonstration of the performance of the Avro "Avenger" with Napier engine. Figures cannot be given, but the machine is certainly extremely fast.

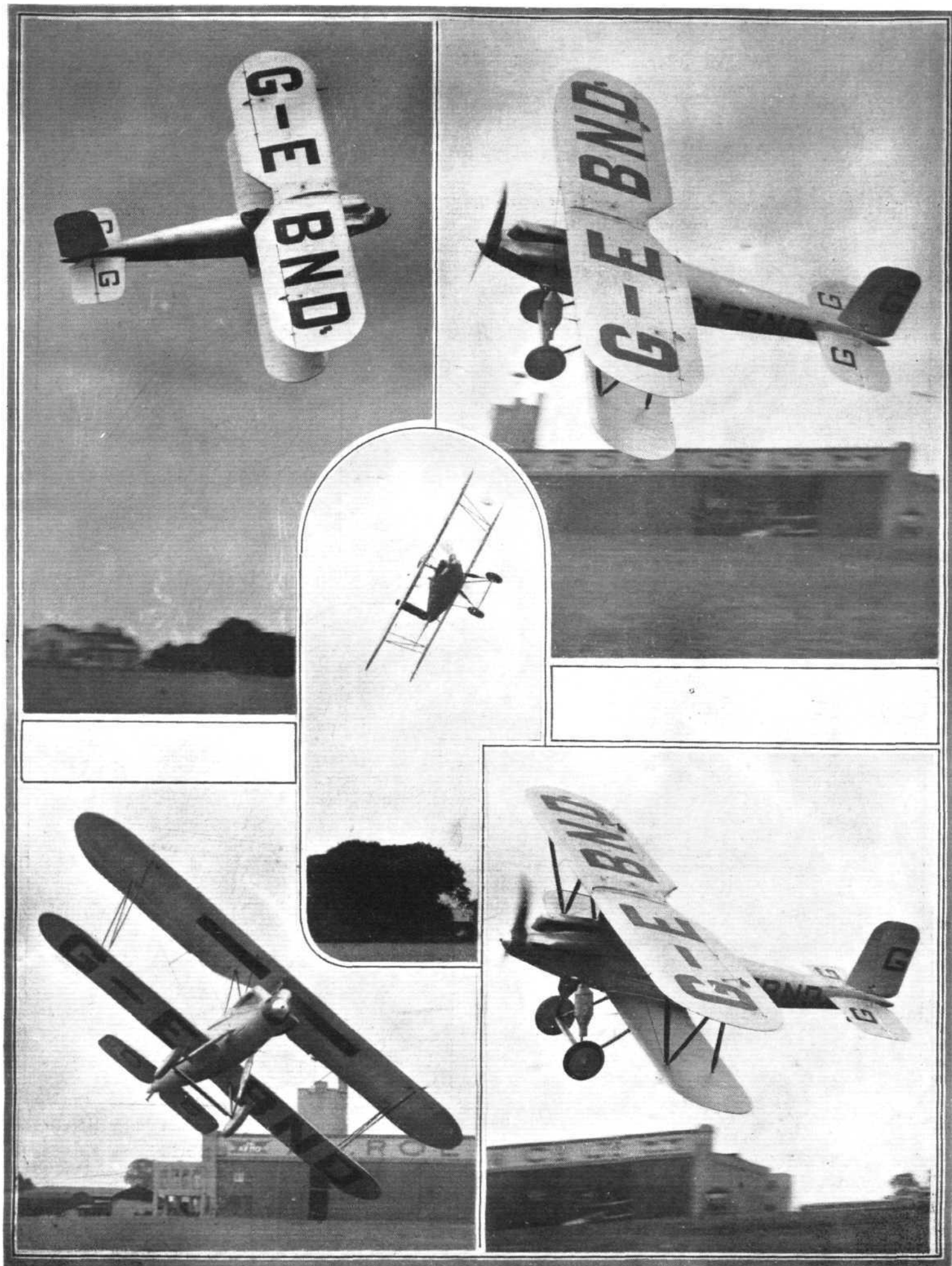
["FLIGHT" Photograph]





THE AVRO "AVENGER": These four views of the machine show the remarkably clean lines. The rudder, wholly above the tail, somehow gives a German appearance. In the inset Mr. Bert Hinkler "gives scale" to the nose. It should be remembered, however, that Hinkler is one of our smallest pilots in the matter of stature, though certainly not in nerve.

[ " FLIGHT " Photographs ]



MANŒUVRABILITY: These views of the Avro "Avenger" in flight, piloted by Bert Hinkler, indicate that controllability is not lacking. The engine is a Napier.

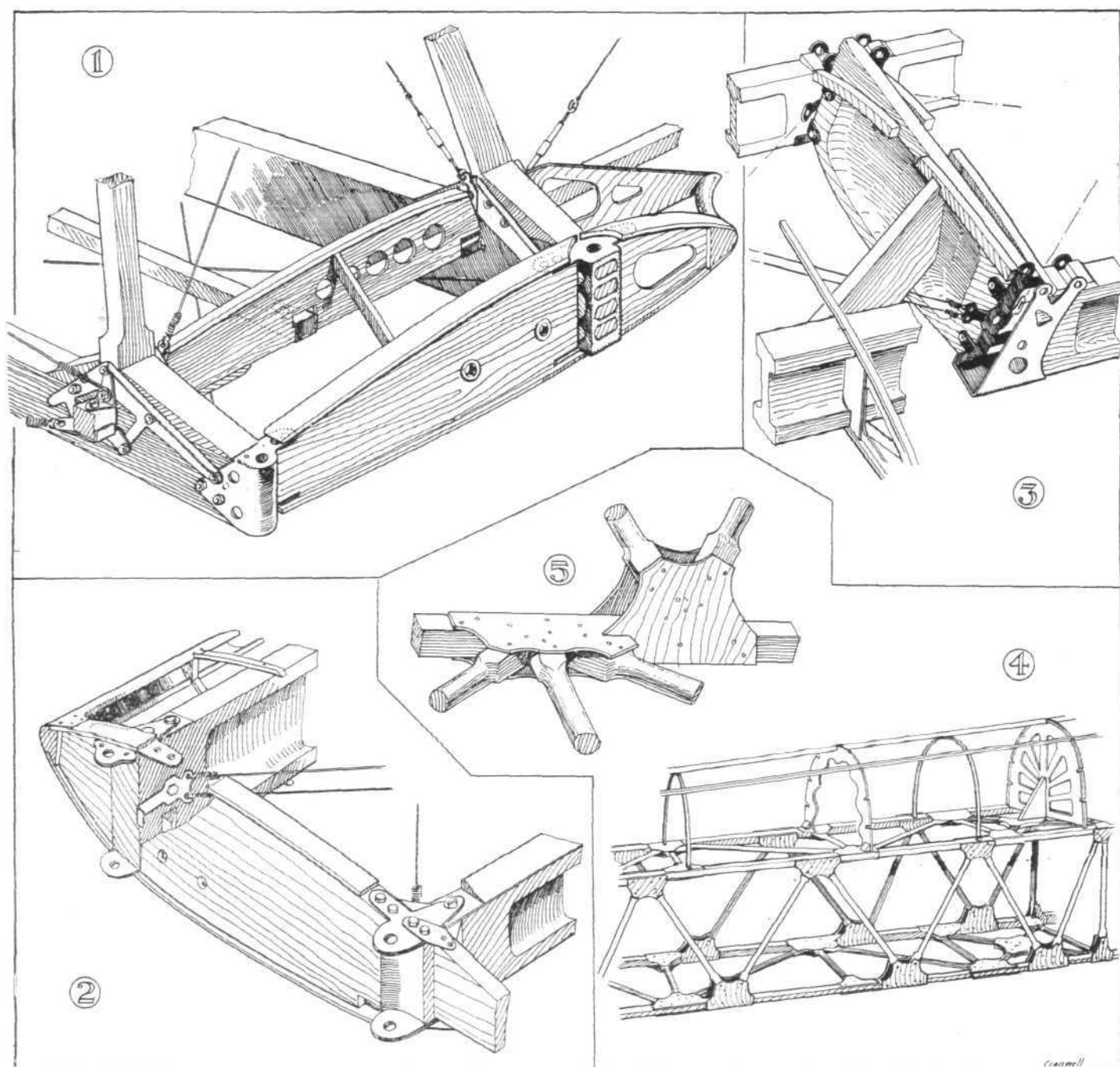
[ FLIGHT " Photographs

# THE CRANWELL LIGHT AEROPLANE IV.

## An Interesting Training Machine Built by Amateurs

IN view of the fact that this year's Cranwell light aeroplane, designed by Flight-Lieut. N. Comper and built by members of the Cranwell Light Aeroplane Club, was based mainly on the Pobjoy engine, a few words concerning this engine may serve to explain in many respects the reasons underlying the fundamental design of the C.L.A. IV. Designed by Capt. Pobjoy, the "P" engine, as it is called in the entries list, is a seven-cylinder radial air-cooled engine of extraordinarily low power-weight ratio. Without going into

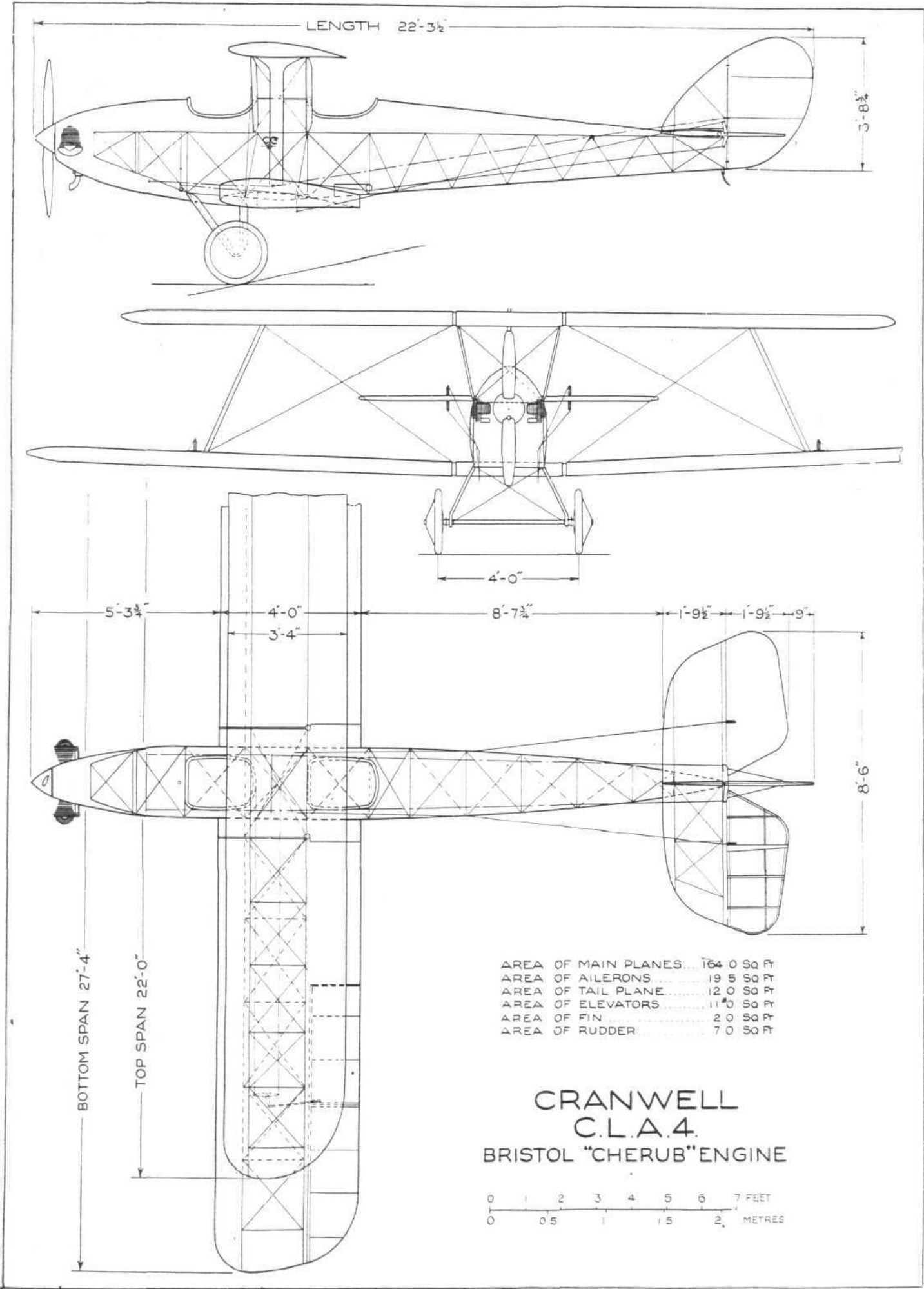
details we may say that Capt. Pobjoy has been guided in the design of this engine by the principle that all parts subject to heavy loads of one sort or another should be very substantially built, while so far as possible there should be no parts which were not contributing to the work of the engine, all helping to "pay their way." The result has been an engine differing in many respects from orthodox practice, but achieving a maximum horse-power of 65 b.h.p. for the astonishingly low weight of 100 lbs., this figure



[ " FLIGHT " Copyright Sketches

**THE CRANWELL C.L.A. IV :** Some constructional details : 1, The lower plane wing roots built into the fuselage. The bottom longeron is shown broken away behind the rear spar so as to show better the metal fitting, and between the spars this longeron passes just inside the inner rib. The rear undercarriage strut is attached to the front spar attachment. The hinges for folding the wings are also shown. In 2 is illustrated the inner end of the starboard lower plane, with hinge fittings, etc. The solid rib is partly broken away to show the form of the drag bracing clip. 3 illustrates the special rib and sheet steel fittings for the inter-plane I-strut on the lower plane. This strut slopes inwards, the sketch being viewed from outside the strut attachment. The spar is broken away to show the details of the special metal fitting for the attachment of the strut. The form of construction employed in the rear portion of the fuselage is illustrated in 4, while 5 shows details of this construction, the actual joint shown being on the lower longeron and viewed from inside.





THE CRANWELL C.L.A. IV : General Arrangement Drawings to Scale.

including the weight of two magnetos. Coupled with this light power-weight ratio, the engine has the advantage of very low fuel consumption, the actual figure being just over 0.5 pint/h.p./hour. It is hoped that later on there may be an opportunity of describing this very interesting engine in detail. For the present, space does not permit of doing so, but in order thoroughly to understand the Cranwell machine it is essential that one should bear in mind that its design was based on the "P" engine. We are quite sure everyone will sympathise sincerely with Capt. Pobjoy and the Cranwell Light Aeroplane Club when we point out that it seems extremely unlikely that the engine will take part in the Lympne competition. This is due to the fact that in the course of the type tests at Farnborough a breakage occurred which, although due to a cause which in itself was quite trivial, will nevertheless have the effect of preventing the type tests being passed in time for the machine to take part in the competition. We are quite convinced that the engine will pass its type tests in the near future, but in the meantime the failure is a very serious blow, not only to Capt. Pobjoy and those associated with him, but also to the Cranwell Light Aeroplane Club, who will be deprived of one of the two machines entered for the competition.

The two machines entered by the Cranwell Light Aeroplane Club are identical except for the engines, the power plant fitted in the second machine being a Bristol Cherub, Series III. In the design of this machine Lieut. Comper had in mind not only a two-seater aeroplane suitable for collecting points in the competition, but also a machine which should prove a practical training machine afterwards. As the general arrangement drawings will show, the machine is of somewhat unorthodox design as regards the arrangement of its wings, having a top plane of considerably smaller chord and span than those of the bottom plane. There were various reasons for choosing this arrangement, which may possibly be very slightly less efficient aerodynamically than the more orthodox arrangement of an unequal span biplane in which the top plane has the larger area. Chief among these was the desire to provide a good view from both cockpits. With the arrangement chosen the small chord of the top plane has enabled Lieut. Comper to place the front cockpit ahead of the top plane and the rear cockpit behind it, so that from either cockpit the view upwards is not obstructed to any serious extent, and this has been effected without necessitating the usual cut-out portion in the trailing edge of the top plane, which probably has some effect on aerodynamic efficiency. The fact that there are no ailerons on the top plane also results in a certain amount of saving in drag, while from a structural point of view the short free length of the top spars is, of course, an advantage, in that it permits of a not inconsiderable saving in weight.

The single I-struts which connect top and bottom planes are of special construction, and have at the top and bottom of the I special sheet steel fittings sandwiched in between the two layers, these fittings being hinged to corresponding fittings on the main wing spars. The wing section employed in both top and bottom planes is that known as R.A.F. 31, but a slight modification to the original section has been made by symmetrically reducing the ordinates about the neutral chord, as it was not considered that it would be structurally economical to use the full depth of the original section. The main wing spars are of spruce spindled out to an I-section, and the spruce ribs are of usual Cranwell construction. The centre section struts are in the form of steel tubes with wood fairings, and the top centre section itself contains the main petrol tank, as it was feared that with the higher position of the carburettor in the Series III Cherub, a sufficient head of petrol might not be obtained if the tank were placed in the deck fairing of the fuselage.

For the purpose of the Lympne competition the wings are made to fold, although it is not considered that for a machine of this size it is really essential that this feature should be incorporated.

As already mentioned, ailerons are fitted on the lower wing only, and the operating cranks are placed on top of the wing

in order to avoid the risk of damage by contact with the ground and the necessity of wing tip skids. The flaps have a differential action obtained in the usual manner by the angle of the control crank which operates them.

The fuselage of the C.L.A. IV is similar in form to, although slightly larger than, that of the C.L.A. III monoplane. The rear portion is in the form of a Warren girder as regards the sides, while the top and bottom bracing are of "N" formation. The longerons are of ash in front and of spruce at the back, and the diagonal struts in sides, top and bottom are square-section spruce at the ends, turned to a circular section over the greater length. The attachment to the longerons is by means of three-ply gussets, the shape and arrangement of which are illustrated by a sketch. This form of construction is carried from the stern-post up to the rear cockpit, where the structure changes to the more orthodox one of rectangular panels braced diagonally by wire. A curved deck built of light formers and stringers rounds off the top of the fuselage.

The two cockpits are quite roomy, and as already mentioned the view obtained from both is excellent. The dual controls are of somewhat unusual type as regards the stick. This is forked to a longitudinal rocking shaft which operates the wing flaps, but passes up through a "gate," from which the elevator is operated, the stick sliding in this "gate" laterally and also to a slight extent in a vertical direction owing to the difference in centres between the stick pivot and that of the gate. The rudder control is in the form of the usual foot-bars of steel tubing.

The Cherub engine is mounted on a sheet-steel plate similar in shape to that used in previous Cranwell machines, which has been found to answer the purpose well and to be quite light. For details of this engine mounting we must refer readers to a description of previous Cranwell machines, in which this feature has been illustrated. The oil tank is placed immediately aft of the engine, while the petrol tank, as already stated, is contained in the top centre section. A Fairey-Reed duralumin propeller is fitted.

The undercarriage of the C.L.A. IV is in the form of two V's bent up from small diameter light gauge steel tubing, with a through axle and the usual rubber cord shock absorbers. The rear legs of the undercarriage are attached to the wing roots of the lower plane, which are built integral with the fuselage and project some distance past the sides of the fuselage in order to give clearance for the trailing edge of the bottom plane when the wings are folded. These wing roots are built up from very substantial spruce spars of considerable depth, but in the covering the detrimental effect of such deep spars is largely overcome by careful fairing. The tail skid is similar to those used on the Bristol "Brownies," and is in the form of an immovably fixed laminated steel spring.

The fixed tail plane is of steel tube construction, as is also the rudder, while the fin and elevators are of normal wood construction.

On our visit to Cranwell last week we had an opportunity of seeing the club members hard at work, and it was most gratifying to observe the keenness of everybody concerned. Flight-Lieut. Comper has, of course, had the heavy task not only of designing the machine in his spare time, but of seeing to the correspondence of the club, and anyone at all familiar with the amount of work required in designing even a small aeroplane will appreciate that to do this as a spare time job is a heavy tax on a man's strength, both physically and mentally. Among the club members working on the machine were many N.C.O.s, some of whom had agreed to forego their summer holidays in order to get the two machines ready for the competition. That the club should be deprived of one of its machines in the competition is a piece of extremely bad luck, with which we are sure everyone will sincerely sympathise.

The main dimensions of the C.L.A. IV are given on the general arrangement drawings published on page 549. The weight of the machine empty is 480 lbs., and the total loaded weight 860 lbs., so that the wing loading is 5.25 lbs. per square foot, and the power loading 25.3 lbs. per h.p. We hope to publish photographs of this machine next week.

## New York-Paris Flight

ALTHOUGH the Sikorsky 3-35 biplane (three "Jupiters") on which Capt. Fonck hoped to cross the Atlantic is all ready for the attempt, the start has been delayed owing to a dispute over the personnel of the crew!

## A Denmark-Poland Air Route

A NEW air route between Denmark and Poland was opened on August 24. This is being operated by the Polish

Air Traffic Co., with (?) Junkers seaplanes constructed at Limhamn, Sweden, between Copenhagen and Putzig.

## Through Air Traffic Tickets

THE International Air Traffic Association Conference, which has been sitting in Berlin, approved a proposal to introduce through tickets for all the European air lines, to be available in combination with railway tickets.





# ROYAL AIR FORCE MEDICAL BRANCH

## New Pay and Conditions

THE Air Ministry announces that with the approval of His Majesty's Government improvements have been made in the conditions of service and emoluments of medical officers of the Royal Air Force. The Air Council attach great importance to attracting into the service the best type of medical man, since on the capacity of the medical service depends to a peculiar degree the safety and efficiency of the Air Force. The duties of a medical officer in the Air Force include not only the prevention and treatment of those ordinary diseases to which the personnel of any fighting service are liable, but the special study of the mental and physical stresses imposed upon the aviator in diverse circumstances and climates—a branch of medicine of which the civil profession has hitherto had but little experience. The work to be done therefore has a high professional interest, and with the improved conditions detailed below it is hoped that applicants of the best quality will be forthcoming.

2. *Short Service and Permanent Commissions.*—Entry into the Medical branch is by means of a short service commission for three years on the active list, extensible to five years. Entry into the service therefore does not commit the entrant to a permanent career, but leaves the individual free to return to the civil profession and the service free to choose the best officers for retention. Permanent commissions are granted by selection to officers holding short service commissions, and in order that all short service officers who desire to remain in the service may have a reasonable opportunity of doing so it has been decided that so far as practicable every entrant shall have a 50 per cent. chance of a permanent commission. Further, in order to assist short service officers who pass to the reserve after five years to set up in private practice, the gratuity issuable on leaving the active list has been increased to £700, the gratuity after three years' service remaining at £350 as hitherto.

3. *Increase of Pay.*—Increases of pay of from 2s. to 11s. a day have been granted in all ranks above Flight-Lieutenant, and the scale in force from July 1, 1926, will be seen from the following table. The rates shown in the first column are "standard" and are liable to the extent of 20 per cent. to periodic variation according to the cost of living. The current rates are shown in the second column and in the third the total yearly emoluments at current rates if allowances are drawn in cash in lieu of provision being made in kind. The cash allowances included are at current home rates for unmarried officers. Married officers over 30 years of age receive higher allowances.

Rank.	"Standard" Rate of Pay per diem.	Current Rate of Pay per diem.	Current Rate of Pay and Allow- ances per annum
	£ s. d.	£ s. d.	£
Flying Officer .. ..	1 4 0	1 2 8	557
Flight Lieutenant .. ..	1 6 0	1 4 6	608
Flight Lieutenant after two years in the sub- stantive rank .. ..	1 8 0	1 6 6	645
Flight Lieutenant after four years in the sub- stantive rank .. ..	1 10 0	1 8 4	678
Squadron Leader .. ..	1 14 0	1 12 2	760
Squadron Leader after two years in the sub- stantive rank .. ..	1 18 0	1 15 10	827
Squadron Leader after four years in the sub- stantive rank .. ..	2 0 0	1 17 10	864
Squadron Leader after six years in the sub- stantive rank .. ..	2 4 0	2 1 6	931

Squadron Leader after eight years in the sub- stantive rank .. ..	£ s. d.	£ s. d.	£
.. ..	2 8 0	2 5 4	1,001
Squadron Leader after ten years in the sub- stantive rank .. ..	2 10 0	2 7 4	1,037
Wing Commander .. ..	2 15 0	2 12 0	1,133
Wing Commander after two years in the sub- stantive rank .. ..	2 17 0	2 13 10	1,166
Wing Commander after four years in the sub- stantive rank .. ..	3 3 0	2 19 6	1,270
Group Captain .. ..	3 10 0	3 6 2	1,463
Air Commodore .. ..	4 0 0	3 15 8	1,691
Air Vice-Marshal .. ..	5 0 0	4 14 6	2,100

Promotion to Flight Lieutenant occurs after two years' satisfactory service, and to Squadron Leader after ten years' service, reducible to eight years in exceptional cases. Promotion above Squadron Leader is by selection subject to minimum periods of service. The Director of Medical Services, if as at present an Air Vice-Marshal, will receive the pay and allowances of his rank.

4. *Retiring Allowances to Permanent Officers.*—The gratuities issuable to permanent officers have been increased to £1,500 after ten years' service and £2,500 after fifteen years' service. After twenty years' qualifying service officers are eligible for retired pay, the amount depending on age and length of service and in the case of senior officers on rank. The maximum rates of retired pay are, subject to certain conditions, as follows, the rates for Air Commodores and Air Vice-Marshals being new:—

Rank	"Standard" Maximum Rate	Current Maximum Rate
	£	£ s.
Air Vice-Marshal .. ..	1,010	954 10
Air Commodore .. ..	950	898 0
Group Captain .. ..	900	850 10
Wing Commander .. ..	600	567 0
Squadron Leader .. ..	500	472 10

5. *Advantages to Holders of House Appointments in Civil Hospitals.*—With a view to attracting into the service graduates who have had the valuable experience provided by a hospital appointment, it has been decided, subject to certain conditions, to allow doctors who have held a resident appointment in a recognised civil hospital for not less than one year—of which, however, half may have been spent in a non-resident appointment—to enter the Air Force with one year's antedate counting for purposes of seniority, promotion, retired pay, and retiring gratuity. Service pay will not, of course, be issuable for the period spent in a civil hospital nor will the time count towards the gratuity payable to short service officers on transfer to the Reserve.

6. *Course of Instruction on Entry.*—Every officer on entry will in future receive eight weeks' instruction in the medical problems connected with flying and in his other Air Force duties.

7. *Improved Opportunities for Professional Study for Permanent Officers.*—With a view to enabling medical officers to take at least one general or specialist course at a civil or a service medical school, it has been decided to allow study leave up to nine months in all to officers during the first sixteen years of their service. So far as possible officers will be allowed such leave when convenient to themselves, and their wishes as to the choice of subject and place of study will be consulted.

8. *Princess Mary's Royal Air Force Nursing Service.*—Improvements have been made in the pay, allowances, and retired pay of nurses.

## ACCOUNTANT OFFICERS, ROYAL AIR FORCE

THE Air Ministry announces that certain improvements have been made in the conditions of service for Accountant Officers in the commissioned ranks of the Royal Air Force. The changes are designed to afford Accountant Officers an opportunity of a longer service career with increased remuneration in the higher ranks and increases of retired pay on retirement corresponding to the longer period of service which they will be able to render.

No change has been made in the pay of the lower ranks,

but the current rates of pay (liable to variation with the cost of living and exclusive of allowances) are now £1 10s. 2d. a day for a Squadron Leader as against £1 8s. 4d. under the old scale, whilst the flat rate under the old scale of £1 13s. a day for a Wing Commander has been increased to £1 15s. on appointment, with further increases to £1 16s. 10d. after three years' service as such and to £1 19s. 8d. after six years' service as such. Provision has also been made for the promotion of officers to the rank of Group Captain carrying a

current rate of pay of £2 7s. 4d. a day exclusive of allowances. The total emoluments, including the cash value of allowances, for a Group Captain, if married and serving at a home station, would at present amount to about £1,146 a year.

The ages for compulsory retirement have now been raised to 53 years for a Squadron Leader and 57 years for a Wing Commander as against 50 and 55 respectively under the old

conditions. The age for compulsory retirement for the new rank of Group Captain is 60 years, and the maximum standard rate of retired pay for that rank is £650 a year.

The new conditions will apply to candidates for commissions as accountant officers who are successful at the examination which is to be held in the latter part of September, particulars of which were announced in *FLIGHT* for July 22 last.

## ALAN COBHAM HOMEWARD BOUND

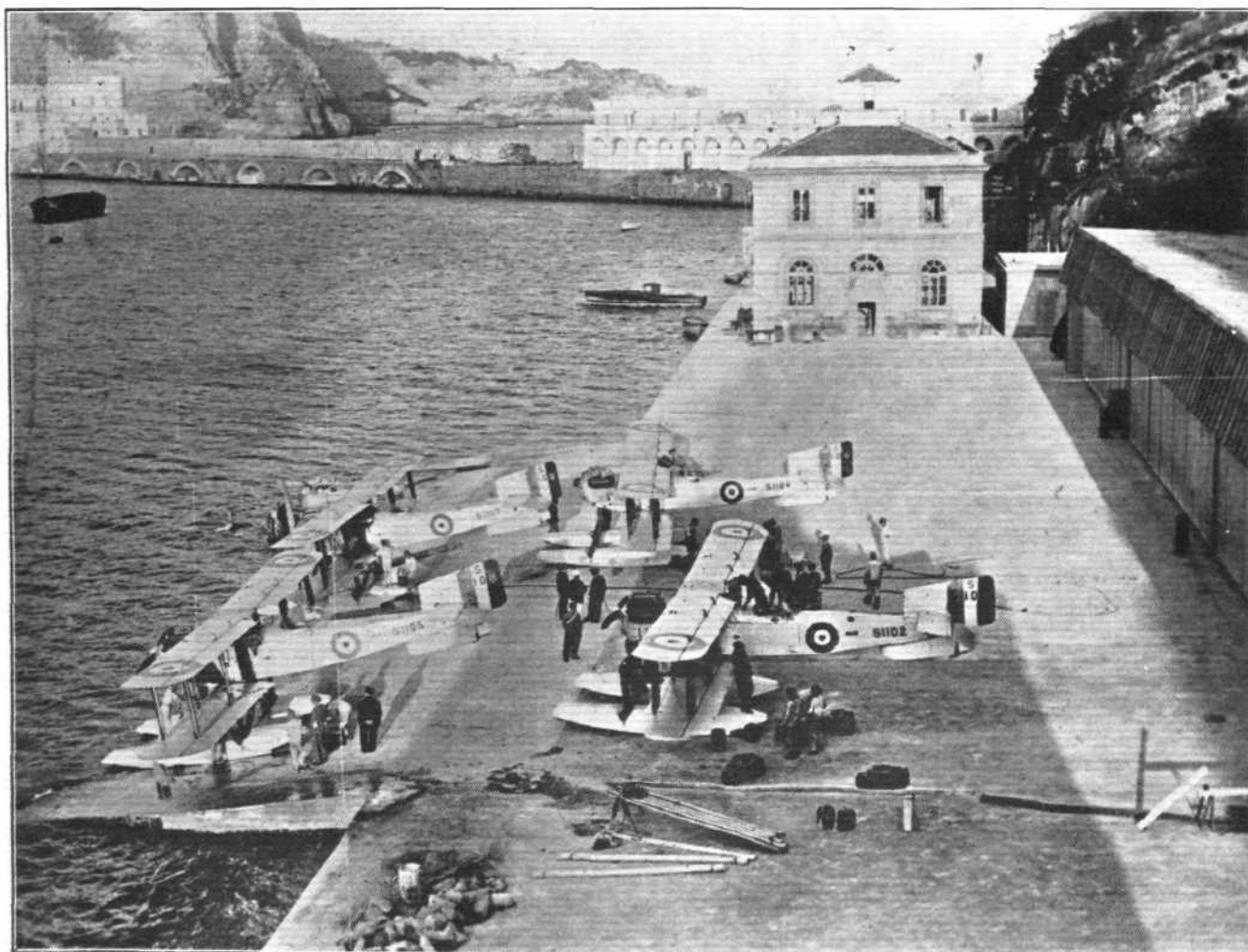
ALL the necessary duties in connection with the overhauling of engine and machine, official and unofficial functions, etc., having been accomplished, Mr. Alan Cobham, on August 29, started on the homeward section of the great Australian flight. In the presence of a distinguished gathering, including Sir Neville Howse (Minister of Defence), Mr. Cobham, accompanied by Serg. Ward, R.A.F., and Mr. C. S. Capel, of Armstrong Siddeley Motors (who will be accompanying them throughout the homeward trip), left Point Cook aerodrome, Melbourne, in the D.H. 50 J.—Siddeley "Jaguar" at 9.30 a.m., during a rain squall.

After a flight of 5½ hours, during which they encountered frequent rain squalls, they arrived safely at Adelaide, about 400 miles distant. Here they received a tremendous welcome from a large but orderly crowd (very different from that which greeted them on their arrival at Melbourne). Amongst those present to greet them were Mr. Lionel Hill, the new Premier, Mr. Isaacs, Acting Mayor of Adelaide, members of the Australian Air Force, and many prominent citizens. After several speeches, in which tribute was paid to Mr. Cobham for his skill and courage, Mr. Cobham was handed over to the care of the Governor, Lieut.-Gen. Sir G. T. Bridges. When replying to the speeches of welcome,

Mr. Cobham referred to the wonderful opportunities of flying offered by Australia, the civil aviation conditions being, he said, second to none in the world. He believed that his flight had greatly stimulated Australian interest in aviation, and he urged them to regard flying as being not in the least dangerous but safely exhilarating.

At 9.30 a.m. next morning, August 30, with cloudy and rainy weather still prevailing, they set out on the journey across Australia to Port Darwin, which, as Mr. Cobham points out, will be the real start for his dash home. They flew that day 650 miles to Oodnadatta, and as they progressed northwards they left the rainy weather behind them, although strong winds at the start compelled Cobham to make a descent at Marree to re-fuel.

On August 31 Mr. Cobham left Oodnadatta at 11 a.m. and made a 350-mile flight to Alice Springs, Northern Territory. He expects to reach Port Darwin today (Thursday), and is not hurrying on this trans-Australia section of the journey as he wishes to see as much of Central Australia as possible. From Port Darwin, however, he will attempt to reach home in record time, following the same route as that by which he came. Mr. Cobham stated that he intended to return to Australia, and hoped to bring his wife and family also, by air.



**CAPE FLIERS AT NAPLES :** This photograph shows the four Napier-engined Fairey III.D seaplanes re-fuelling with "Shell" at Naples on their flight from Cairo to Lee-on-Solent recently, this being the concluding stage of the Cairo-Cape-Cairo-England flight.

# AIR MINISTRY NOTICES TO AIRMEN

## Meteorological Ground Signals at Lypne Aerodrome

Fourth Panel—Weather.

1. A revised system of ground signals to denote to pilots the height of clouds, visibility and weather at the aerodromes at Croydon, Biggin Hill and St. Inglevert was brought into operation at Lypne aerodrome on August 15, 1926. This system is described in the following paragraphs.

2. For each station for which information is displayed, there are four white rectangular panels placed in a line. On these four panels, reading from left to right, are indicated by means of letters or symbols: (a) The station for which the information is given; (b) The height of the lowest cloud; (c) The visibility; (d) The weather.

On the first panel is a single capital letter, permanently fixed, indicating the station to which the information refers.

The second and third panels bear red diamond-shaped marks arranged as on a playing card,\* and indicating, according to their number, the height of the lowest cloud and the visibility respectively. When no information regarding cloud height or visibility (as the case may be) is available, the corresponding panel is left blank. The lowest cloud height in the cloud height scale, and the lowest distance of visibility in the visibility scale, are each indicated by one diamond in the top left hand corner of the appropriate panel, whilst the second lowest cloud height or distance of visibility is indicated by one diamond in the centre of the panel.

The fourth panel is only utilised when one of four adverse weather phenomena is reported. Each of these is represented by a symbol.

3. The signals have the following significance:—

### First Panel—Prefix Letter.

C = Croydon; B = Biggin Hill; S = St. Inglevert.

### Second Panel—Height of Lowest Cloud.

No. of diamonds

1 (in top left-hand corner of panel) means cloud below ..	50 metres = 150 ft.
1 (in centre of panel) means cloud below ..	100 " = 300 "
2 means cloud below ..	200 " = 600 "
3 " " " " " "	300 " = 1,000 "
4 " " " " " "	600 " = 2,000 "
5 " " " " " "	1,000 " = 3,000 "
6 " " " " " "	1,500 " = 5,000 "
7 " " " " " "	2,000 " = 6,500 "
8 " " " " " "	2,500 " = 8,000 "
9 " no low cloud	
A blank panel means no observation.	

### Third Panel—Visibility.

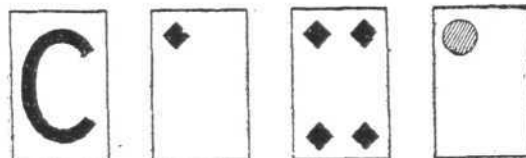
1 (in top left-hand corner of panel) means visibility less than ..	50 metres = 55 yds.
1 (in centre of panel) means visibility less than ..	200 " = 220 "
2 Means visibility less than ..	500 " = 550 "
3 " " " " " "	1,000 " = 1,100 "
4 " " " " " "	2,000 " = 1½ miles
5 " " " " " "	4,000 " = 2½ "
6 " " " " " "	10,000 " = 6½ "
7 " " " " " "	20,000 " = 12½ "
8 " " " " " "	50,000 " = 31½ "
9 " " " " " "	50,000 metres or more = 31½ miles or more.
A blank panel means no observation.	

\* As an exception, the nine is arranged in three rows of three diamonds and not in the conventional manner.

### Symbol.

- ..... Rain or drizzle.
- ✱ ..... Snow hail or sleet.
- ⚡ ..... Thunderstorm or line-squall.
- G ..... Gale.

4. Example:—



which would indicate

Croydon.      Lowest cloud below 150 ft.      Visibility 1,000 yds.      Rain or drizzle.

5. The signals referring to Biggin Hill and Croydon are placed so as to appear the right way up to a pilot flying in a north-westerly direction, while the St. Inglevert signal is placed so as to appear the right way up to a pilot flying in a south-easterly direction.

6. AIR PILOT APPENDIX.—Para. 70 of the Air Pilot Appendix is cancelled.

No. 46 of 1926.

## Flight Over Royal Air Force Aerodromes

It is notified that:—

1. The General Rules for Air Traffic comprised in Section III of Annex D of the International Air Convention, and reproduced in Section III of Schedule IV to the Air Navigation (Consolidation) Order, 1923, are observed by all Royal Air Force aircraft, except in the following circumstances:—

- (a) During air fighting practice.
- (b) During formation flying, training or practice.
- (c) When aircraft of experimental units are engaged in research.

2. Civil aircraft, therefore, should as far as possible avoid flying over or in the vicinity of Royal Air Force aerodromes, and should in all cases give way to formations of aircraft. In doing so they should observe the same rule as would apply between a flying machine and an airship.

3. Commercial aircraft engaged on regular services, except in cases of emergency, should not fly within 1 mile of any part of the perimeter of the following aerodromes: Kenley, Biggin Hill, Hawkinge, Manston.

Air Pilot.—An amendment to the Air Pilot, para. 74A, will be published in due course.

(No. 44 of 1926.)

## Pelletier Doisy's Remarkable Flight

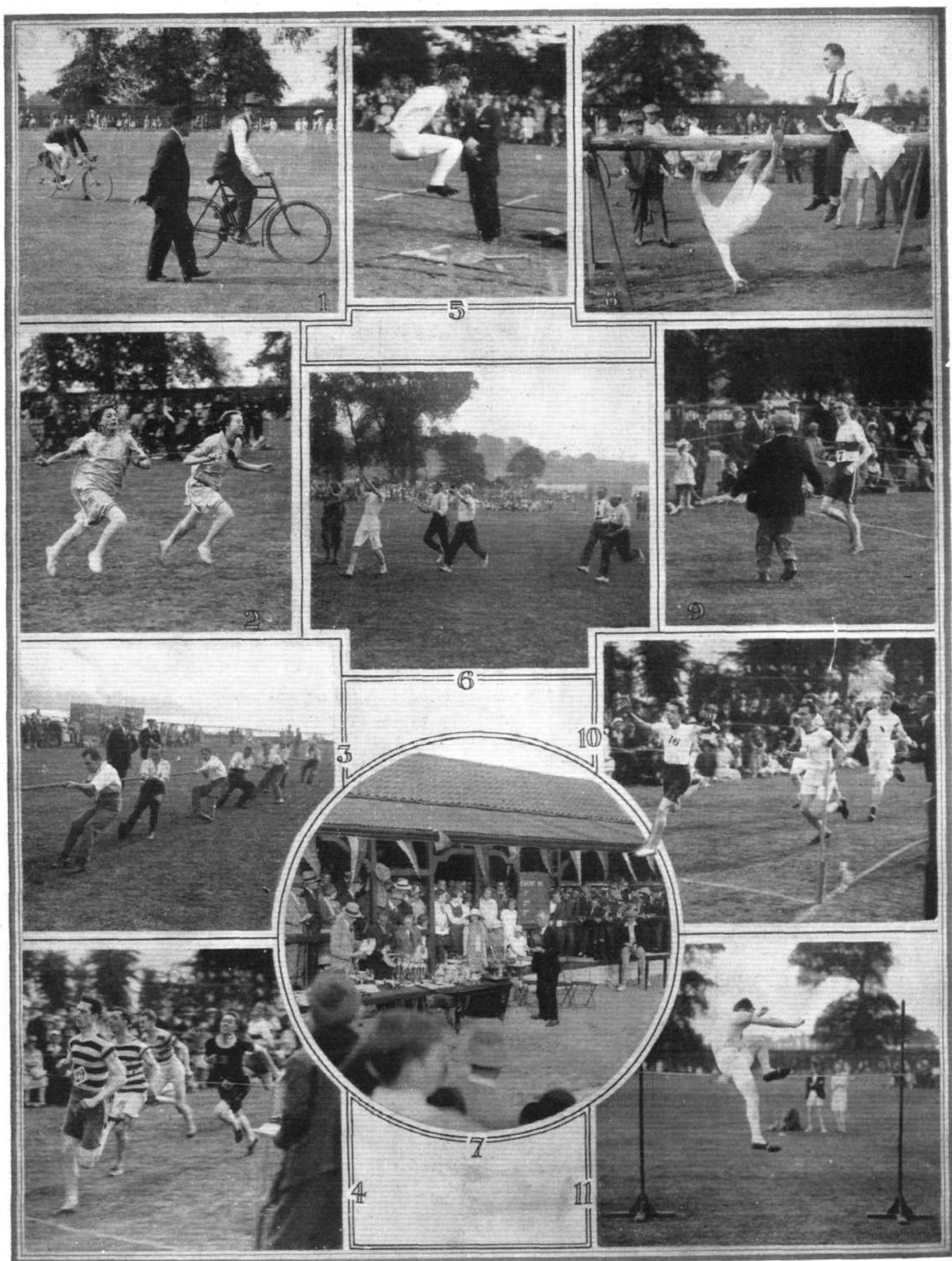
CAPT. PELLETIER DOISY has once again accomplished a remarkable long distance flight, in which he has demonstrated extraordinary powers of endurance. Doisy left Villacoublay in a Potez biplane (450 h.p. Lorraine-Deitrich) at 5.30 a.m. on August 24, accompanied by his mechanic Carol. By mid-day Doisy had reached Rome, where he made a stop of about an hour and a half in order to refuel, and at 7.40 p.m. he arrived at Tunis. He stayed here one hour to refuel, and then continued to fly by night across North Africa to Casablanca, where he arrived at 8.30 a.m. the next morning. As soon as he had refuelled he set off again for Paris. Flying via Madrid, Doisy reached Bordeaux at 6.30 p.m. that evening. After an hour's stop he completed the last stage to La Bourget, where he arrived just before 8 o'clock, very tired but none the

worse for his exploit. The whole flight lasted exactly 41 hrs. 45 mins., of which 34 hrs. 57 mins. were actual flying. The total distance covered was about 3,750 miles, so that his average speed was something like 107 m.p.h. Only a little over 6 hrs. were spent on the ground, and Doisy throughout the flight had no real rest. "Shell" oil and aviation spirit were used by Doisy on this splendid flight.

## Bournemouth Air Race Meeting Prizes

THE Royal Aero Club has distributed the following prizes in connection with the Bournemouth Air Race Meeting held on August 21 and 22, 1926:—D. A. N. Watt, £100; London Aeroplane Club, £80; W. L. Hope, £65; A. S. Butler, £50; Capt. G. de Havilland, £45; Royal Aircraft Establishment Aero Club, £30; Mrs. S. C. Elliott-Lynn, £20; Midland Aero Club, £20.





[ "FLIGHT" Photographs ]

**DE HAVILLAND SPORTS MEETING :** Held at the Old Welsh Harp Sports Ground on Saturday last, this meeting was a great success. Our photographs show : 1, Mr. P. Rae (on left) winning the slow cycle race. 2, Miss C. Smith wins the 80 yards' ladies race. 3, Winning tug of the erecting shop. 4, Mr. W. Calam wins the 220 yards (radius) handicap. 5, The winning long jump of Mr. F. W. Amos. 6, The Veterans' 100 yards handicap was won by Mr. E. Marriott. 7, Mrs. Walker presenting the prizes. 8, Mr. Baker becomes a casualty in the pillow fight. 9, G. Hearne wins the one mile (radius) handicap. 10, The 440 yards closed handicap won by Mr. F. G. A. Mott. 11, Mr. W. L. Allardyce's winning high jump.

## D.H. SPORTS MEETING

GLORIOUS summer sunshine favoured the Sports Meeting of the de Havilland Sports Club, which was held at the Old Welsh Harp Sports Ground on Saturday last, August 28, and the spectators, numbering well over a thousand, were treated to some excellent racing. The programme, which had been arranged by the Sports Secretary, Mr. C. A. Pike, ably assisted by Mr. Pugsley and Mr. Benn, was a long and very interesting one, and the organisation was such that during the whole afternoon there was never a dull moment. Thanks to the energetic work of Mr. Groombridge, Chief Clerk of the Course, the time-table was closely adhered to, in spite of the fact that in many cases extra heats were found necessary owing to the numerous entries received on the ground.

The various open events attracted several well-known athletes, such as, to mention but a few, J. A. R. Sanders, of Queen's Park Harriers, I. W. Savage, of Edgware, and A. L. Kilcoyne, of the St. Mary's Harriers. The official starter was Mr. F. Gordon Brown, of the Middlesex C.A.A.A., whose efficient way of handling his somewhat arduous duties caused much favourable comment.

In the various closed events excellent fields are to be recorded, and it was evident that the de Havilland Aircraft Company has in its ranks many runners of outstanding ability. Mr. Amos, of the engine shop, and Mr. Allardyce, of the fitting shop staff, were both popular winners, while Mr. Benn won a well-deserved place in the 220-yards race. In the one-mile relay race the engine department scored a win, and in the tug-of-war first place fell to the erecting shop.

During the afternoon the band of the First London Divisional Royal Engineers rendered an excellent programme of music, which was continued in the form of dance music in the evening for the benefit of those who still retained sufficient energy for a fox trot on the grass.

The sports meeting of an aircraft firm would not be complete without its aerial demonstration, and this was provided by Mr. Sparks, who gave some pretty exhibitions of loops, spins, rolls, etc., on a "Moth."

It was a matter for the very sincerest regret that Captain and Mrs. de Havilland were unable to be present, owing to the sudden illness of their son, and Mrs. Walker had to take over the task of presenting the prizes in place of Mrs. de Havilland. This she did with her customary grace, and was rewarded by a few words of thanks from Mr. Tom Clark and a bouquet of flowers from little Miss Vera Morse.

### Winners

The winners of the various events were as follows:—

100 Yards Closed: F. W. Amos.  
 Throwing the Cricket Ball: R. E. Hardingham.  
 100 Yards Closed (under 17): W. Hammet.  
 Slow Cycle Race: P. Rae.  
 100 Yards (Radius) Handicap: J. Sweeney, Highgate H.  
 Pillow Fight: Taylor.  
 Tug-of-War: Erecting Shop.  
 220 Yards Closed: F. W. Amos.  
 Children's Race (Girls under 11): Leach.  
 Children's Race (Boys under 11): Bradley.  
 Children's Race (Girls under 14): Whatten.  
 Children's Race (Boys under 14): Bradley.  
 220 Yards (Radius) Handicap: W. Calam, Queen's Park H.  
 Long Jump: F. W. Amos.  
 Sack Race: Kelley.  
 80 Yards Ladies (Open): C. Smith.  
 "Boat Race": Transport Department.  
 440 Yards Closed: F. G. A. Mott.  
 High Jump: W. L. Allardyce (4 ft. 8 in.).  
 880 Yards (Radius) Handicap: J. A. R. Sanders, Queen's Park H.  
 Veterans' 100 Yards Handicap: E. Marriott.  
 One Mile Relay: Engine Department.  
 Obstacle Race: P. Rae.  
 Mixed Three-Legged Race: C. J. Morley and Miss Duffey.  
 One Mile (Radius) Handicap: G. Hearne, St. Mary's H.  
 Band Spot Race: Bandsman Foster.

## PROF. BOËL AND THE ALBATROSS

ON Thursday last we had the pleasure of a short interview with Prof. M. A. Boël, Chef de Service of the Aerodynamic Laboratory of Belgium, who was staying a few hours in this country on his way back to Belgium after a long cruise in the sailing ship *Avenir*. Prof. Boël's name will, no doubt, be known to many readers of *FLIGHT* in connection with the problem of natural flight (bird, insect and plant) and their relation to mechanical flight—a fascinating and important subject to which Prof. Boël has devoted some considerable amount of time.

During the last ten or eleven months Prof. Boël has been away from Belgium on a special mission on behalf of the Belgian Government, the object of which was to study the flight of the albatross and to collect data which would throw light, as reliable as possible, upon the extraordinary aerodynamic qualities of this king of gliders. A portion of this cruise took the *Avenir*—a splendid full rigged ship employed for training cadets—along the west coast of Africa (Dakar etc.), and to Australia and the South Seas.

Prof. Boël thus had the opportunity of making some close observations of the albatross (and incidentally of the vulture and other efficient gliders) both in flight and otherwise, with the result that he has been able to collect some valuable infor-

mation—which, by the way, is supplemented by some very interesting photographs and cine-films—not only on the flight of the albatross, but as regards its "construction and design." In this latter connection Prof. Boël has discovered a most interesting "constructional detail" in the bird's wing—we believe, hitherto unnoticed—which indicates that his theory, that the secret of the remarkable gliding qualities of the albatross is due purely and simply to its high aerodynamical efficiency and not to any peculiar air currents, is correct.

His observations do not bear out the statement that the albatross glides for long periods without wing beats, but that wing movement is present, although hardly perceptible. Its high efficiency and high aspect ratio wings enable it to maintain flight with the minimum of effort.

However, we hope very shortly to give our readers more detailed information on this interesting subject as soon as Prof. Boël has prepared all his notes and data for publication to the world.

In conclusion, we wish to congratulate Prof. Boël on the successful conclusion of his mission, which we trust will add considerably to the progress of scientific aeronautical research.

### French Long-Distance Attempts

ON the same day, August 24, that Capt. Doisy started on his long distance flight, two other well-known French pilots set out from Le Bourget for the purpose of beating the non-stop flight record. The first of these was Capt. Pollon with Capt. Van Caudenberghe, in a S.E.C.M. Amiot biplane (500 h.p. Renault), their destination being the Persian Gulf and India. Engine trouble, however, compelled a descent at Alkozen in Prussia. The second attempt was made by Lieut. Chasles and Capt. Weiss, on a Breguet (500 h.p. Farman), who followed close on the heels of Pollon, in the same direction. They in turn were compelled to return at Bucharest, owing to a severe storm. A third and equally unsuccessful attempt was made the same day by Capt. Le Maitre and Bares, who

started from Villacoublay in a Breguet-Renault, but they were forced to return almost immediately owing to petrol trouble.

They had a second try on August 26, but ignition failure brought them down at Vienna, the machine being damaged in landing.

### Aircrew Accident at Croydon

AN unfortunate mishap occurred at Croydon aerodrome on August 28, when a visitor, Gladys Houghton (aged 13), was struck by the aircrew of one of the Surrey Flying Services Avros, which collided with the enclosure railings after landing. The girl was severely injured, and was taken to Purley Cottage Hospital.



# LIGHT 'PLANE CLUB DOINGS

## London Aeroplane Club

REPORT for week ending August 29: The total flying time for the week was 56 hours 20 minutes.

The following Members had flying instruction:—Miss O'Brien, H. Petre, T. W. Eady, R. L. Portway, M. P. Susman, Col. Farfan, G. Black, H. Solomon, B. D. Tucker, E. K. Blyth, G. C. Bonner, D. Usher, J. S. Boulton, D. P. H. Esler, R. C. Woodcock, R. A. St. John, O. H. Best, A. J. Richardson, H. R. Presland, H. F. Wight, C. H. Tutt, T. C. Angus, E. D. Moss, J. C. Crammond, G. Lyon, R. Malcolm, A. L. A. Petty, C. E. Murrell, J. C. Elford, E. A. Lingard, V. H. Doree, P. F. England, H. Wood, D. L. Stalley, A. Lees, G. M. Hall.

The following Members flew solo: N. J. Hulbert, H. Petre, G. H. Craig, E. E. Stammers, E. S. Brough, A. Lees, A. G. D. Alderson, B. B. Tucker, W. Hay, E. K. Blyth, O. J. Tapper, G. N. Warwick, Miss O'Brien, E. D. Moss, R. Malcolm, J. S. M. Michie.

The following were given joy rides: B. D. Waugh, D. C. MacLachlan, F. Yates Brown, Miss Fletcher, G. W. West, I. D. Lloyd, L. G. Valpy.

## Hampshire Aeroplane Club

REPORT for week ending August 28:—This week has been very gratifying indeed to all connected with the Club, as the total flying time exceeded 22 hours.

For a newly formed Club possessing at the moment only one instructor, this is a really good performance, and is testimony to the untiring energy of Captain G. I. Thomson.

Total flying time: 22 hrs. 12 mins. Instruction flying: 21 hrs. 12 mins. Passenger flying: 1 hr.

The following Members received instruction flights: Miss Home, 1 hr. 15 mins.; Major Jenkins, 2 hrs. 10 mins.; Lt. Trait, R.N., 1 hr. 17 mins.; Lt. Graham, R.N., 1 hr.; Wing-Commandr. Willie, 35 mins.; Flying Officer Clarkson, 10 mins.; Messrs. Fry, 2 hrs.; Dobson, 1 hr. 32 mins.; Bound, 1 hr. 30 mins.; Keeping, 1 hr. 30 mins.; Simmonds, 1 hr. 32 mins.; Nicholson, 55 mins.; Dickson, 30 mins.; Stokes, 25 mins.; Heathcote, 25 mins.; Bowen, 32 mins.; Perfect, 32 mins.; Henderson, 32 mins.; Fowler, 25 mins.; Kerry, 22 mins.; Southcliffe, 15 mins.; Mansbridge, 15 mins.; Bishop, 47 mins.; Burry, 12 mins.; Heathcote, 12 mins.; Sanderson, 10 mins.

The following Members received passenger flights: Miss Dobson, 12 mins.; Miss Fry, 12 mins.; Mrs. Thomson, 15 mins.; Professor J. O. Thomson, 10 mins.

## The Lancashire Aero Club

Owing to bad weather flying has been possible on only four days. Machines in use LV and MQ (Moths) and OM (Avro-Renault). Mr. Stack gave instructions to Messrs. Costa, 5 hrs. 10 mins.; Honeyball, 1 hr. 45 mins.; Wade, 1 hr. 35 mins.; Heys, 1 hr. 10 mins.; Collinson, 1 hr. 10 mins.; Crossthwaite, 1 hr. 10 mins.; Fallon, 1 hr. 5 mins.; Nelson, 40 mins.; Pitman, 40 mins.; Goodyear, 35 mins.; Patteaux, 30 mins.; Foxcraft, 30 mins.; Gerrard, 25 mins.; Barker, 10 mins.; Leeming, 10 mins. Total, 17 hrs. 10 mins.

Mr. Cantrill gave instruction to Miss Brown, 1 hr. 10 mins.; Messrs. Honeyball, 20 mins.; Scholes, 15 mins. Total 1 hr. 45 mins. Mr. Scholes gave instruction to Mr. Marsland, 20 mins.

Solo flights by Messrs. Leeming, 5 hrs. 5 mins.; Michelson, 2 hrs. 10 mins.; Wilkinson, 2 hrs.; Agar, 1 hr. 45 mins.; Goodfellow, 1 hr. 45 mins.; Hardy, 1 hr.; Pitman, 35 mins.; Goodyear, 15 mins.; Cantrill, 10 mins.; Williams, 10 mins. Total solo, 14 hrs. 45 mins. Tests occupied 2 hrs. 10 mins.

The following had joy rides with Messrs. Stack, Goodfellow and Leeming: C. Agar, 1 hr. 50 mins.; P. Heys, 1 hr. 10 mins.; H. Tattersall, 35 mins.; Miss P. Nuttall, 25 mins.; A. Goodfellow, 20 mins.; Miss N. Roberts, 20 mins.; Mrs. R. Williams, 15 mins.; J. Bradley, 15 mins. Total time flown in week, 37 hrs. 5 mins.

Mr. Pitman, who is also a member of the London Club, made his first solo on Thursday. Mr. Pitman learned to fly in 1919, but has not flown since except for a little "dual" in the last week or so. A cross-country trip to Southport was made on Wednesday.

## The Midland Aero Club

REPORT for week ending August 28:—The total flying time for the week was 20 hrs. 32 mins.

The following members received flying instructions: E. T. Beard, C. Fellows, A. R. Gibbons, C. Burrows, S. H. Smith, J. Brinton, H. Smith, H. Willis, H. Beamish.

The following members made solo flights: E. J. Brighton, H. Willis, G. Perry, R. L. Jackson. Three test flights took 35 mins., two passenger flights 30 mins.

On Monday Capt. McDonough flew from Bournemouth to Castle Bromwich on EBLT.

Tuition is closing down from Wednesday, September 1, until Wednesday September 15, to enable the staff to take a well-earned holiday.

Considerable progress is being made in reconditioning the hangars and buildings on the aerodrome for occupation again, and it is anticipated that the Club will move into their new quarters during the next fortnight.

## The Newcastle-upon-Tyne Aero Club

REPORT for week ending August 29:—The total amount of flying carried during the week was 32 hours 45 mins. 29-35 hours on LY and 3-10 on LX, which was again put on service on Sunday morning.

Dual—21-40, solo—8-40, passenger (with Mr. Parkinson) 2.15, test 10 mins.

The following members flew under instruction during the week:—Sir Joseph Reed, Messrs Middleton, Shaw, Gilmore, Bruce, J. M. Kennedy, E. C. Kennedy, Turnbull, Stewart, Prendergast, Palmer, J. M. Davidson, V. S. Davidson, Whitfield, H. Ellis, Miesagaes. Secondary dual—Dr. H. L. B. Dixon.

The following flew solo and with passengers:—Mr. H. H. Leech, Dr. Dixon, Mr. C. Thompson (with Mrs. Heslop, Miss Storey and Mr. Campbell), Mr. W. Baxter Ellis (with Miss Ainley, Mr. H. Ellis and Mr. J. G. Edmundson), Mr. P. F. Heppell (with Mr. Ogdon), Mr. L. Smith, Mr. F. Howard Phillips (with Mr. A. Bell), Mr. N. S. Todd (with Mr. Synge and Mr. Goodbody). Passengers who flew with Mr. J. D. Parkinson—Mrs. Gilmore, Miss E. Bruce, Miss Haig, Mr. Priestley and Mr. Parker.

A very satisfactory number of entries has been received for the various events which will be flown at the Club's Meeting on September 4, and includes those of the following:—

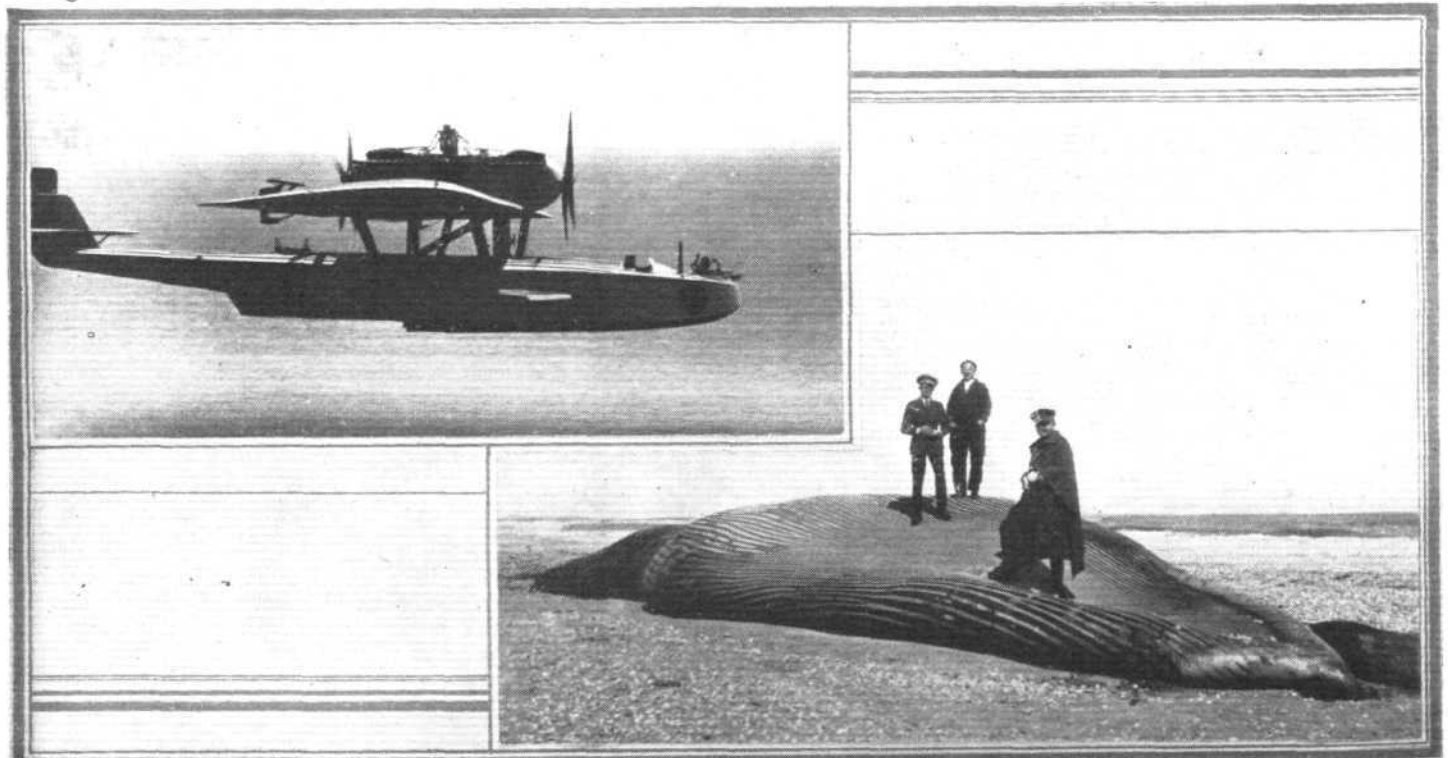
Mrs. S. C. Elliott Lynn, Air Commodore J. G. Weir, whose machine will be flown by Mr. A. N. Kingwell, Mr. L. L. Irvin, Capt. Broad, who will fly the King's Cup "Moth," Capt. Courtney, who will pilot the "Nimbus" Martinsyde, entered by Col. M. O. Derby. The London Aeroplane Club have entered one machine, which will be flown in several events by Capt. F. G. M. Sparkes, and Mr. R. Malcolm and Mr. E. D. Moss will fly as passenger with Capt. Sparkes.

The Yorkshire Aero Club are sending both of their machines, but it is not known yet who will be the pilots. The Club is very grateful for the support of the London and Yorkshire Clubs, and regrets very much that it has not been possible for the Lancashire Club to send a machine.

The Officer Commanding, Royal Air Force Training Base, Leuchars, has very kindly arranged for a Flight of Fairey Flycatchers to attend, and two Hawker Woodcocks, which will be visiting Cramlington at this time, will be seen also.

The Newcastle and District Motor Club have arranged a very interesting series of events, in which Members will take part riding motor-cycles.

There will not be a dull moment throughout the meeting, and there is promise of complete success.



**THE TWO WHALES:** A pilot of a Spanish Dornier "Wal" (Whale) flying-boat spotted a real whale during a recent flight, and, descending, pilot and crew claimed their prize. Our pictures show the "artificial" whale in the air, and the real thing after capture.



# THE ROYAL AIR FORCE

London Gazette, August 26, 1926

## General Duties Branch

The following Pilot Officers are promoted to rank of Flying Officer:—G. D. Harvey; May 15. J. H. McN. Campbell; June 17. P. McK. Terry; June 17. The following are transferred to Reserve:—Class A.—Flight-Lieut. C. Jackson; Aug. 23. Class C.—Flying Officer D. G. Pinnell; Aug. 21. Flying Officer A. M. Rowe; Aug. 21.

The short service commn. of Pilot Officer on probation A. H. Campbell-Horsfall is terminated on cessation of duty; Aug. 14. Pilot Officer A. E. Hamilton res gus his short service commn.; July 8.

## Accountant Branch

Pilot Officer on probation T. P. E. Campbell is confirmed in rank and promoted to rank of Flying Officer; Aug. 10.

## Medical Branch

Flying Officer J. Parry-Evans is granted a permanent commn. in this rank; Aug. 25.

## Reserve of Air Force Officers

The following are granted commissions on probation in General Duties Branch in ranks stated:—Class A.—Flying Officer J. R. Foster; Aug. 24. Class A.A.—Pilot Officer P. D. V. Hackett; Aug. 11.

The following relinquish their commissions on completion of service:—Flying Officer J. R. Cox; April 20. Flight-Lieut. F. G. Saunders, M.C.; April 20. Pilot Officer R. J. Ewins; June 19. Flight-Lieut. C. H. Young, M.B.; July 13. Flying Officer J. H. Huxley, D.F.C.; Aug. 4. Flying Officer H. W. Owen; Aug. 7. Flying Officer P. T. Hubbard; Aug. 21. The commission of Pilot Officer on probation W. Dougall is terminated on cessation of duty; July 28.

## Princess Mary's R.A.F. Nursing Service

Miss K. M. Beall resigns her appointment as Staff Nurse, acting Sister Aug. 13.

## ROYAL AIR FORCE INTELLIGENCE

**Appointments.**—The following appointments in the Royal Air Force are notified:—

### General Duties Branch

**Squadron Leaders:** W. V. Strugnell, M.C., to No. 21 Group H.Q., West Drayton, 1.9.26. D. Stewart, M.C., A.F.C., to Armament and Gunnery Sch., Eastchurch, 23.8.26. H. S. Powell, M.C., to H.Q., Coastal Area, 9.8.26. C. H. Elliott-Smith, A.F.C., to No. 56 Sqdn., Biggin Hill, 15.8.26. E. D. Atkinson, D.F.C., A.F.C., to No. 25 Sqdn., Hawkinge, 24.8.26. A. P. Maurice, D.F.C., to Night Flying Flight, Biggin Hill, 22.7.26. K. H. Riversdale-Elliott, to Sch. of Army Co-operation, Old Sarum, 12.8.26.

**Flight Lieutenant:** J. G. Horne, to R.A.F. Depot, Uxbridge (Non-effective Pool), 1.8.26.

**Flying Officers:** J. D. I. Hardman, D.F.C., to No. 16 Sqdn., Old Sarum, on transfer to Home Estab., 22.9.26. R. W. E. Bryant, to No. 5 Flying Training Sch., Sealand, 6.8.26. F. W. W. Wilson, to Marine Aircraft Experimental Estab., Felixstowe 1.9.26. H. L. Beatty and Hon. (Flight-Lieut.) G. N. Carroll, to No. 480 Flight, Calshot, 1.9.26. E. S. C. Vaughan, M.C., to remain at No. 7 Sqdn., Bircham Newton, instead of to Armament and Gunnery Sch., as previously notified. R. Y. Eccles, to remain at No. 111 Squadron, Duxford, instead of to No. 5 Flying Training Sch., as previously notified. C. J. Clark, to R.A.F. Depot, Uxbridge, on transfer to Home Estab., 30.7.26.

### Stores Branch

**Flight Lieutenants:** G. F. Law, to R.A.F. Depot, Uxbridge, on transfer to Home Estab., 6.8.26. W. A. Gasper, to Air Ministry (D. of E.), 1.9.26. **Flying Officer:** C. W. H. Moller to No. 1 Flying Training Sch., Netheravon, 11.8.26.

**Pilot Officer:** P. J. Mote, to Sch. of Balloon Training, Larkhill, 11.8.26.

### Accountant Branch

**Flight Lieutenant:** G. N. Simon, to No. 2 Flying Training Sch., Digby, 11.8.26.

**Flying Officer:** J. Charles, to H.Q., Egypt, 13.8.26.

**Pilot Officer:** R. J. Wishlade, to No. 7 Sqdn., Bircham Newton, 19.8.26

### Medical Branch

**Flight Lieutenants:** F. K. Wilson, M.B., to No. 4 Sqdn., Farnborough, 25.8.26. (Hon. Sqdn. Ldr.) F. W. Squair, M.B., T.D., to R.A.F., Reception Depot, West Drayton, 17.8.26.

**Flying Officers:** E. J. Mockler, M.B., to R.A.F. Depot, Uxbridge, 17.8.26. E. J. Jenkins, to Station H.Q., Andover, 20.8.26.

**Flying Officer:** E. A. Rice, M.B., to Research Lab. and Med. Officers' Sch. of Instruction, on appointment to a short service commn., 16.8.26.

## French Government Orders All-metal Wibaults

AVIONS MICHEL WIBAULT, of Billancourt, Paris, have received an order for their all-metal monoplanes from the French Government. The machines are similar to those being built by Messrs. Vickers at Weybridge for a foreign Government.

## Air Cadetships

THE following are declared by the Civil Service Commissioners to be the successful candidates at the competition held in June last for admission to the R.A.F. Cadet College, Cranwell—subject to their having passed a medical examination. The names are in the order of merit:—

Easton, J. A.; Frost, A. H. E.; Taylor, L. V.; Dale, H. R.; Grundy, E. M. F.; Wells, W. J. M.; Dark, A. E.; Pratt, C. V. J.; Tindall-Cavill-Worsley, G. N. E.; Cooper, R. J.; Homer, J. W.; Pringle, H. J.; Williams, R. D.; Bayne, D. W.; Stratton, J. A. C.; White, N. E.; Ferguson, J. H. P.; Aldrich-Blake, P. G.; Martin, E. L.; Councell, R. B.; Pocock, N. E. I.; Lainé, E. J.; Manning-Fox, J. H.; Jørgensen, J. E.; Younghusband, R. H.; Savage, J. W. King's Cadets who have qualified: Ryley, C.; Sprague, R. A.

## The "D.H. Gazette"

CONGRATULATIONS and welcome to No. 1 of the "D.H. Gazette," the latest addition to the ranks of house journals of British aircraft firms, which has just been issued by the De Havilland Aircraft Co., of Stag Lane. It is full of interesting items and illustrations, and is excellently produced.

## Changes in French Air Organisation

THE accession to power of the Poincaré Ministry has resulted in a considerable shake-up of the French Air organisation. For reasons of economy the Under-Secretariat for Aeronautics, which was the central co-ordinating organ between the military, naval and civil air services, was suppressed, together with all the other Under-Secretariats. M. Laurent-Eynac, the Under-Secretary for Air, who held this post continuously from January, 1921, to July, 1926, and outlived ten Cabinets, resigned when the Briand Ministry fell and was not re-appointed by the short-lived Herriot Ministry.

M. Laurent-Eynac's retirement from the post he had filled for so long leaves unanimous regrets in French flying circles. Owing to his untiring energy, his ready grasp of the situation,

his ability to pick capable collaborators and his great personal charm, he succeeded in securing for France the position of leading air power this country now holds. The policy of long service flights either for record breaking or for propaganda purposes, which has produced such remarkable performances, is directly attributed to his personal influence, while his foresighted attitude in encouraging French aircraft constructors resulted in France regaining most of the world's aviation records, which she had lost to the United States in 1923.

With the suppression of the Under-Secretariat for Aeronautics, the technical service, the manufacturing control service, the air navigation service and the meteorological service, which depended from the first-named organisation, have been grouped under a Directorate-General of Aeronautics, which is attached to the Ministry of Commerce after having been temporarily attached to the Ministry of Public Works. Inspector-General Fortant, hitherto director of the technical service, has been appointed head of this directorate with the title "Civil Director of Aeronautics." Col. de Goys, who was for long years Mr. Laurent-Eynac's *Chef de Cabinet*, will in all likelihood be appointed director of military aeronautics in place of Gen. Dumesnil, who has held this post since 1920.

## Awards of Flight Cadetships to Aircraft Apprentices, and of "Sir Charles Wakefield" Scholarship and "Hyde-Thomson" Memorial Prize

The Air Ministry announces:—"Aircraft Apprentices J. T. Stephenson, J. Mutch, W. R. Worstall, A. L. Weaitt and F. Whittle, from No. 4 Apprentices' Wing, Cranwell, and Aircraft Apprentice C. B. Hughes, from the Electrical and Wireless School, Flowerdown, have been selected for cadetships at the R.A.F. Cadet College, Cranwell, on the results of the examinations held on completion of their three years' training as aircraft apprentices.

" 'Sir Charles Wakefield' Scholarships, valued at £75 each, have been awarded to Flight Cadet H. R. Dale, who obtained the fourth place in the recent competitive examination for entry into the Cadet College, and to Flight Cadet J. T. Stephenson. The 'Hyde-Thomson' Memorial prize, valued at about £33, has been awarded to Flight Cadet C. B. Hughes. In addition, the 'Sir Charles Wakefield' Scholarship, the award of which was deferred in November, 1925, has now been granted to Flight Cadet C. E. St. J. Beamish."

# CORRESPONDENCE

*The Editor does not hold himself responsible for opinions expressed by correspondents. The names and addresses of the writers, not necessarily for publication, must in all cases accompany letters intended for insertion in these columns.*

## AIRSCREW TIP SPEEDS

[2145] When preparing the article "Aircraft Tip Speeds" (*The Aircraft Engineer*, July 29), I must admit that I was unaware of the very interesting official figures relating to American Racing Aircraft, which are cited by Mr. Cronstedt in his letter published in your issue of August 5 (No. 2143).

The following table quoted from Major Buchanan's paper in the Royal Aeronautical Society's Journal of July, 1926, goes to show that the Curtiss of 1925 was using a tip speed lower than the English machines of the same year, and also lower than their own machine of 1923.

Machine.	Year.	r.p.m.	Prop. diam. ft. ins.	Tip speed ft./sec.
Curtiss..	1925	2,350	7 8	940
Gloster III.	1925	2,700	7 9	1,100
Supermarine S 4	1925	2,700	8 0	1,135
Gloster II	1924	2,500	8 10	1,150
Curtiss..	1923	2,300	8 6	1,020
Bamel	—	2,300	9 6	1,150
Sea Lion	1922	2,300	8 8	1,040

Mr. Cronstedt's statement would appear to invalidate the latter part of this conclusion and to deprive me of American support in my contentions. It is only fair to Major Buchanan to remark that he states that his data was gathered from a large number of sources, and that he found it impossible to check all the details with absolute accuracy.

R. K. PIERSON

Weybridge, August 12, 1926.

## PERSONALS

### To be Married

The engagement is announced between Flight-Lieut. DAVID S. EARP, D.F.C., youngest son of the late Mr. W. J. Earp and Mrs. Earp, of Wandsworth Common, and CAROLYN, daughter of Dr. FRANCIS S. NASH, Medical Director, U.S. Navy, and Mrs. Nash, of Washington, D.C.

The engagement is announced between Flight-Lieut. DUDLEY D'H. HUMPHREYS, R.A.F., only son of Mr. and Mrs. Humphreys, of Bournemouth, and MARGERY CONSTANCE, only daughter of Mr. and Mrs. Fox Lowe, of Limpsfield, Surrey.

The engagement is announced of Mr. LEWIS FRANCIS JONES, late R.F.C. and R.A.F., only son of the Rev. Lewis and Mrs. Jones, of Wold Newton Vicarage, Hunmanby, Yorkshire, and Miss COLLEEN RUTH MARSLAND, youngest daughter of Mr. and Mrs. ELLIS MARSLAND, of The Court House, Painswick, Gloucestershire.

An engagement is announced between Mr. IAIN O'B. MACGREGOR, R.A., and R.A.F., son of Lieut.-Colonel T. MacGregor, of Edinburgh, and Miss EDITH JOAN HARRISON, daughter of the late H. A. Harrison, I.C.S., of Doghurst, Viewswley, and of Mrs. MAYNE CAMPBELL, of Broxmore Park, Romsey, Hants.

The engagement is announced between Flight-Lieut. RICHARD THORNTON NEVILL, Reserve of Air Force Officers, only son of the late Mr. Frank Nevill, J.P., and Mrs. Nevill, Llanelly, Carmarthenshire, and RUBY, younger daughter of Mr. and Mrs. H. SPENCE THOMAS, of Whitchurch, Cardiff.

### Killed

Flight Officer ROY NUGENT TREHERNE GAPE, who was killed while flying at Cambridge on August 18, was the son of Capt. and Mrs. Gape, of Clanricarde House, Tunbridge Wells, and St. Albans.

T. STUART GLENDINNING WATSON, Cadet, Royal Australian Air Force, who was killed in an aeroplane accident near Point Cooke, Victoria, Australia, on July 1, was the eldest son of the late George Glendinning Watson, M.B., C.M., Coburg, Melbourne. His age was 23.

Flying Officer T. H. J. WRIGHT, R.A.F., who was killed on August 16 at Frimley, during message-dropping practice, was a son of the Rev. J. Wright, vicar of Addiscombe, Croydon. A promising officer, he was a Captain in the 1st Seaforth Highlanders, and attached to the R.A.F.

## New World's Altitude Record

ON August 23, M. Callizo, flying a Spad (450 h.p. Lorraine-Dietrich), succeeded in beating his previous altitude record of 12,066 m. (40,783 ft.). After a flight lasting 2 hrs. 24 mins., his two barographs registered respectively 12,800 m. (41,988 ft.) and 12,500 m. (41,660 ft.).

## Alan Cobham's Siddeley "Jaguar"

ARMSTRONG Siddeley Motors, Ltd., recently received the following cable from Mr. Alan Cobham, when at Melbourne awaiting a favourable opportunity to start on his return flight to England:—

"Have just dismantled engine after 160 hours running after flight from London to Melbourne first time cylinders removed since start flight discovered engine in perfect condition. Bearings same as when started and during whole of flight engine never failed us once. Congratulations on supreme reliability Siddeley Jaguar engine.—Cobham."

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## SIDEWIND

WE are glad to be able to state that the reports and rumours relating to a fire which occurred at the Willesden factory of British Celanese, Ltd., on August 18, were greatly exaggerated. The fire was confined to the "Celanese" store and offices; the dope factory was practically intact, only the laboratory being temporarily put out of commission. Their store and plant for making Government dope and their well-known brands of "Novellon" are untouched, and they are in a position to supply promptly unlimited quantities.

◆ ◆ ◆ ◆

## NEW COMPANY REGISTERED

IRVING AIR CHUTE OF GREAT BRITAIN, LTD., Works Road, Letchworth, Herts.—Capital, £10,000, in £1 shares. Manufacturers, Dealers in air chutes, parachutes and all devices for saving life in connection with aeroplanes and balloons, and to manufacture and deal in aeroplanes, hydroplanes, seaplanes motor cycles, cars and other vehicles, etc. L. Le Roy Irving (Goldershot Hall, Letchworth, Herts., inventor), Solicitor: L. F. Crane, Bush House, Aldwych, W.C.2.

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## AERONAUTICAL PATENT SPECIFICATIONS

Abbreviations: Cyl. = cylinder; i.c. = internal combustion; m. = motor. The numbers in brackets are those under which the Specifications will be printed and abridged, etc.

### APPLIED FOR IN 1925

Published September 2, 1926

- 9,232. B. FRANCIS. Flying machines of biplane type. (256,298.)
- 9,359. D. J. MOONEY. Metal framework for aircraft. (255,921.)
- 13,854. DOUGLAS MOTORS, LTD., and C. G. PULLIN. Cam mechanism. (256,353.)
- 14,827. G. MENGDEN. Course indicators. (237,568.)
- 18,689. R. A. COURTIN. Parachutes. (237,612.)
- 22,613. DOUGLAS MOTORS, LTD., and C. G. PULLIN. Valves of i.c. engines. (256,414.)
- 23,018. SCHNEIDER ET CIE., and J. FIEUX. Gyroscopic stabilising apparatus. (243,316.)
- 23,114. A. LAMBLIN. Feed pumps. (241,533.)
- 24,925. H. R. HART. Flying-suits. (256,429.)
- 24,926. H. R. HART. Aviators' helmets. (256,430.)

### APPLIED FOR IN 1926

Published September 2, 1926

- 2,819. G. M. POVERUD. Propellers and tractors. (256,486.)
- 12,132. C. BARRELLIER. Tail-holding carriage for aeroplanes. (252,356.)

## FLIGHT

*The Aircraft Engineer and Airships*

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